



Motor Vehicle Occupant Injury Brief

Injury Prevention & Control Program

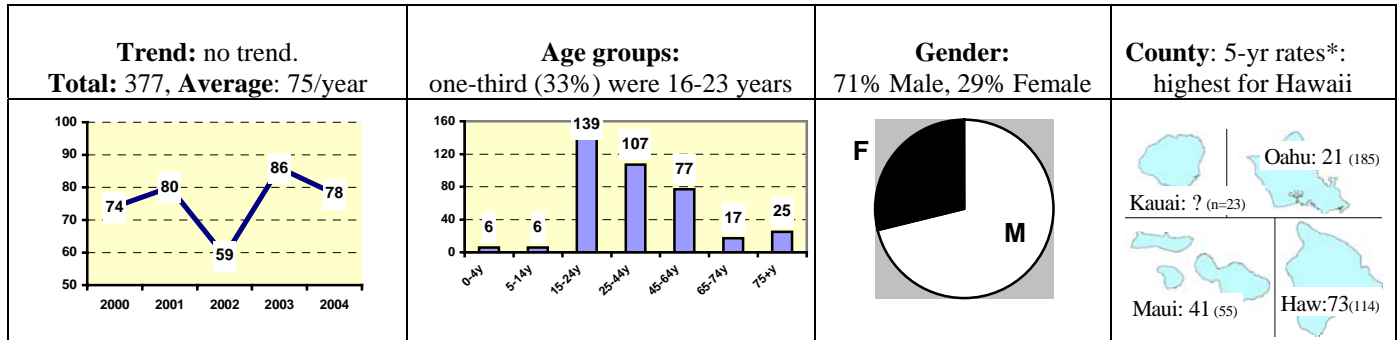
Overview of Fatal Injuries

Annual crude rate (1999-2002): 3.1 deaths per 100,000 (6.9 per 100,000 for rest of U.S.)

Hawaii state ranking (1999-2002): 45th highest (MS highest: 24.8/100,000, CT lowest: 1.1/100,000)

Injury ranking (2000-2004): 3rd leading cause of fatal injuries, 2nd leading cause of unintentional

An average of 75 motor vehicle (car) occupants were killed each year in Hawaii, with no significant trend over the 1998-2002 period. Almost half (44%) of the victims were in the 15-29 year age range, and the highest rates were computed for 15-19 year-olds (89deaths/100,000 residents). Residents aged 14 years or younger had the lowest rates (5/100,000). Most (71%) of the victims were males, although women actually outnumbered men among victims who were 65 years of age or older (55% were women). Although almost half (49%) of the occupants were killed on Oahu, fatality rates were significantly higher for Neighbor Islands, particularly Hawaii County. The rate for Hawaii County was nearly twice that for Maui County, and more than three times the rate for Honolulu County.



*Unadjusted rates per 100,000 residents over the 2000-2004 period. The number of deaths is shown in parentheses.

Contributing Factors

Impaired driving had a major role in Hawaii, as alcohol was estimated to be involved in over half (59%) of the fatalities over the 2000-2003 period, (excluding the 27% of crashes for which alcohol status was not known). That proportion is even higher for occupants killed during nighttime (71%) or on weekends (72%). Failure to use restraints was another important risk factor for fatal crashes, as more than half (56%) of all occupants killed in Hawaii were not wearing seatbelts at the time of the crash. Restraint use was particularly low among passengers (31%), and more specifically among backseat passengers (16%). There was also an association with alcohol use, as drivers who were estimated to have been drinking were nearly half as likely to have used seat belts compared to non-drinking drivers (38% vs. 64%). Nearly half (49%) of these fatal crashes involved speeding. That proportion was higher for crashes on Oahu (62%), compared to Neighbor Islands (36%). About half

(53%) of these crashes involved only a single vehicle and were due to failure to keep in proper lane, running off the road, speeding, inattentiveness, or driver fatigue.

Non-Fatal Injuries

In Hawaii, for every fatally injured occupant, there are an estimated 12 who are hospitalized, and 71 more who are seen in emergency departments. Injuries were most common among 15-29 year-olds, with highest rates computed for 15-19 year-olds. Hospital charges totaled almost \$31.7 million per year, an amount that would be approximately doubled if physician charges were included. An estimated 6,600 patients are treated by ambulance personnel each year in the state, and over 4,800 are transported to hospitals. From Oahu EMS data, the peak time for crashes was between 2:00 p.m. and 5:00 p.m. (27%). The neighborhoods with the highest numbers of injuries were by far Waipahu and Kalihi-Palama (more than 350 per year in each neighborhood). Waianae and Pearl City also had high numbers (more 250 per year in each neighborhood).

Risk Factor Data

According to DOT crash report data, drivers who are 15-18 years of age are at least 4 times more likely to be involved in a crash, compared to drivers 19 years of age and older. Crash rates among 15-18 year-old drivers decreased over the 1998-2001 period, however. According to observational studies in 2003, approximately 89% of front seat occupants in Hawaii use seatbelts, and that proportion is fairly constant across counties. Seat belt and car seat usage in Hawaii has increased in response to legislation.